

DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA 91125

MAJOR LEAGUE TEAM SPORTS

Roger G. Noll

Prepared for publication in Walter Adams, editor
The Structure of American Industry (Sixth Edition)



SOCIAL SCIENCE WORKING PAPER 125

May 1976

Revised November 1980

MAJOR LEAGUE TEAM SPORTS

Roger G. Noll*

The major league sports industry is an exceptionally interesting subject for economic study. Its allure for economists does not lie in its size, for by any reasonable measure the team sports industry is not big business. The total revenue of all teams in the five major team sports--baseball, basketball, football, hockey, and soccer--is less than half the revenue of such mundane endeavors as the manufacture of cardboard boxes or the canning of fruits and vegetables. Pro teams have revenues ranging approximately from those of a large gas station to those of a department store or large supermarket.

The team sports business is interesting to economists primarily because of the complex operating rules and special legal status of the industry. Nearly every phase of the operations of a team or a league is influenced by practices and rules that limit economic competition within the industry. In most cases, government has either sanctioned or failed to attack effectively these anticompetitive practices. Consequently, professional team sports

* Chairman of the Division of the Humanities and Social Sciences and Professor of Economics at the California Institute of Technology.

provides economists with a unique opportunity to study the operation and performance of an effective, well-organized cartel.

THE MARKET STRUCTURE OF MAJOR LEAGUE SPORTS

As do most businesses, a sports team operates in several markets, some of which are local and some of which are national. The most important product markets are the sale of admissions and concessions at home contests and the sale of the right to broadcast play-by-play accounts of games. The most important input markets are the acquisition of skilled professional players and of a facility for staging contests. The characteristics of each of these four markets are somewhat different, so that each must be examined separately. In general, although 122 minor league teams operated in the five sports in 1980, rarely would more than a few find themselves competing in a particular market.

The Player Market

Although a few especially gifted athletes can play at the highest professional level in more than one sport, such individuals are extremely rare. Consequently, each sport has essentially a separate player market through which teams acquire athletes with skills specific to that sport. All teams conduct international searches for players. Even the uniquely American game of football has engaged in an international search for talent since the 1960s when it found a productive use for European soccer players as place kickers.

Superficially, the structure of the player market appears competitive. In each sport, twenty-five to thirty firms all employ approximately equal numbers of athletes; concentration ratios on the demand side of these markets are therefore quite low. On the supply side, a tiny proportion of the population is skillful enough to play major league athletics, and only a handful have the ability to become stars. Still in any year the number of, say, .300 hitters in baseball or 50-yards-per-game running backs in football is sufficiently numerous that the market is likely to be reasonably competitive.

Despite these appearances, the player market is not competitive. Although the details differ from sport to sport, professional sports leagues all have some version of a "player reservation system"--a mechanism for reducing the competition for players among teams in the league.

Leagues have separate rules for regulating competition for three types of players: "rookies," players about to begin a professional career; veterans whose present team desires to retain their services; and veterans who are no longer wanted by their current employer. The effect of all three systems is to divide as many players as possible from the relevant pool of present and potential major league players into separate submarkets--one for each team--in which each team has an exclusive bargaining right with the players assigned to its submarket.

The method for allocating exclusive bargaining rights for rookies is the free agent draft. In every sport at a specified time during the year--typically at the conclusion of the high school and

college season in the same sport--teams in each league, normally in reverse order of finish during the previous season, select players from among eligible amateur athletes to be added to their "reserve list." A player may then negotiate only with the team that selected him, and in all sports except baseball rights to negotiate with the player perpetually belong to the selecting team unless it trades or sells those rights to another member of the league. In baseball, if a player does not sign a contract with the team that drafted him within six months his name returns to the list of athletes eligible for the draft.

In all sports a veteran player has some freedom to change teams even if his current employer wants to retain the rights to his services. This is done by exercising the "option" to "play out" his contract and become a "free agent." What this means is that a player can gain his freedom to negotiate with another team by playing an additional year in baseball, football and basketball, an additional two years in soccer, or an additional three years in hockey under terms specified in his last contract. In baseball, a player must also have six years of experience to be eligible for free agency.

After playing out his option, a player is not completely unencumbered in his ability to negotiate a job with a different employer. In football and hockey, and in basketball through 1981, the team that signs the player who has played out his option must indemnify the team that he left with some combination of players, draft choices and cash that compensates his old team for its loss due to his departure. In football, compensation is determined by a

formula that is negotiated with the players' association. The compensation is the assignment of rights to draft choices, with the amount of compensation determined by the experience and playing time of the player who plays out his option. In basketball through 1981 and hockey, the amount of compensation is determined by the Commissioner of the sport. Although few cases have arisen in these sports, the 1979 Bill Walton case illustrates the use of the compensation system to punish severely teams that sign a free agent. NBA Commissioner Larry O'Brien awarded Walton's old team, the Portland Trail Blazers, several key players from San Diego, the team that signed him, even though Walton's ability to play, owing to a foot injury, was highly questionable (indeed, Walton played only a few games for San Diego, and his career remains in jeopardy).

The compensation requirement--called the "Rozelle Rule" after its inventor, Commissioner Pete Rozelle of the National Football League--reduces the amount a team is willing to pay a player who has played out his option, and thereby the wage that he will obtain in the competition for his services. As of 1980, baseball and soccer had no compensation rule; however, in collective bargaining, baseball owners are trying to obtain it. In basketball, the compensation system ends in 1981 unless the players agree to extend it as part of the collective bargaining agreement. In basketball, all that is scheduled to remain after 1981 is the right of a player's team to keep him by matching the offer he receives from a competitor. In baseball, the only factors now limiting competition for veteran free agents in baseball are that only twelve teams are allowed to compete for any

given player, and that each team is limited in the number of free agents that it can sign. Both rules have proven to be too lax to be effective in limiting significantly the salaries of players.

Even the limited freedom of veterans to switch teams is a relatively recent event. In the early days of team sports, the rights to a player were perpetual. Once a player signed his first contract, the rights to negotiate with him were thereafter the exclusive property of a single team as long as the terms of his contract were satisfied. This situation changed in the mid-1970s in all sports, largely because of efforts of players' unions through antitrust actions and collective bargaining, a topic to which we will return later.

The effects of baseball's relatively liberal system of free agency—including its absence of compensation—has been dramatic. In 1970, the mean salary of baseball players was approximately \$45,000, and only a handful of players earned more than \$100,000. By contrast, the salaries of the opening-day lineup of the Philadelphia Phillies in 1980 were as follows:

1B	Pete Rose	\$800,000
2B	Manny Trillo	400,000
SS	Larry Bowa	400,000
3B	Mike Schmidt	560,000
LF	Greg Luzinski	350,000
CF	Garry Maddox	425,000
RF	Bake McBride	400,000
C	Bob Boone	600,000
P	Steve Carlton	400,000

The average salary for the entire team, including second line players, was well over \$200,000. All of the starting lineup of the Phillies are veteran players who either have gone through the free agent process or who have been induced to stay out of the free agent process by the Phillies because of lucrative contract offers. The obvious affect of the free agency system in baseball has been a dramatic increase in the pay of veteran players. The player market monopsony in baseball is now confined to players in the first few years of their careers. Of course, because the median duration of a baseball career is about five years, it is still true that the majority of players never have the opportunity to enter a competitive player market. The primary beneficiaries of the free agent system are the star players who enjoy long careers.

In all sports, if a team no longer wants to retain the services of a player, several possibilities are available. First, the team may trade the player to another team for other players and/or draft choices. Second, the team may sell the rights to negotiate with the player to another team. In baseball a player with ten years' experience has the right to veto the assignment of his contract to any particular team, and in soccer players can refuse assignment to teams outside of Canada and the United States. In other sports some players have succeeded in including similar rights in their contracts. Nevertheless, even in these cases the player cannot negotiate with several teams while a trade is pending and then veto all proposed trades except one to the team he favors. A player may never negotiate with any team while under contract to another, and must decide whether

to veto a trade without discussing the matter with any team other than his current employer. And, for all but the handful of players with veto rights, a player has no alternatives other than playing for the team that acquires his contract or retiring from the league.

The third alternative for a team wishing to remove a player from its roster is to place him on "waivers." The waiver list is a pool of players available for drafting by other teams, again in reverse order of finish. Each team in the same league then decides whether to claim the player on waivers at a price specified in league rules. The price varies from \$100 in football and soccer to \$20,000 in baseball. Only if all teams decide not to claim the player for this price does he then become a free agent, available to negotiate with any team he chooses. Of course, the amount of salary increase he can expect is, to say the least, limited once he has been released by his present team after all other teams have decided against obtaining him by trade, purchase or waiver.

The sports with extensive minor leagues--baseball and hockey--have an additional set of rules for preventing competition for minor league professionals. These rules are similar to those regulating the acquisition of rookies and waived veterans, with a player becoming eligible for a drafting procedure at certain stages of his career or when a major league club for whom he is under contract removes him from its roster of reserved players. Soccer, a sport in which major leagues are organized throughout the world, has an international player reservation system as well as a national one. The numerous foreign players on U.S. and Canadian teams have been acquired from

foreign teams through rules governing the transfer of veteran contracts that are similar to the rules described above.

The effect of this labyrinth of rules is to grant each team a monopsony in an artificially created submarket of the market for players. This monopsony is broken only when a new league emerges. Although a new league nearly always adopts rules dividing the player market among its teams, interleague competition still emerges. A player will be drafted by one team in each league, and these two teams will then engage in duopsonistic competition for his services. Two competitors, of course, constitute a far cry from perfect competition. Even so, the effect of a new league on salaries is dramatic, usually leading to a doubling of salaries within the first year or two. For example, the following are the salary increments enjoyed by three players as a result of the emergence of the World Hockey Association in 1972.

<u>Player</u>	<u>Salary (dollars)-/</u>		
	<u>1971-72</u> <u>(NHL)</u>	<u>1972-73</u> <u>(WHA)</u>	<u>1972-73</u> <u>(NHL offer)</u>
Gerry Cheevers	\$57,500	\$200,000	\$ 70,000
John McKenzie	48,000	100,000	100,000
Derek Sanderson	50,000	300,000	80,000

/ Taken from contracts submitted in evidence in Philadelphia World Hockey Club, Inc. v. Philadelphia Hockey Club, Inc., U.S.D.C. Eastern Pennsylvania C.A. 72-1661 and Boston Professional Hockey Association v. Derek Sanderson, U.S.D.C. Massachusetts C.A. 72-2490c.

More generally, after the formation of the American Basketball Association, the median player salary rose by 60 percent from 1967 to 1971. Even more dramatic was the effect of the formation of the World Hockey Association in 1972. Average NHL salaries increased from \$24,000 in 1971-72 to \$40,000 in 1972-73.—

— For salary data, see James G. Scoville, "Labor Relations in Sports," in Roger G. Noll, editor, Government and the Sports Business, Brookings Institution, 1974, p. 193 ff.

These figures illustrate the value of the player reservation system to teams. The system gives each team a property right in the players on its roster. The value of that property right is the discounted present value of the sum of difference in the player's competitive wage and the wage that is actually paid over his remaining career.— Trades of players, many of which involve cash payments,

— The discounted present value of a stream of revenues through time is the amount a prudent investor would pay today to earn those revenues, given the current rate of interest. For example, if someone will pay \$10 per year forever and if the interest rate at which money can be borrowed or lent is 10 percent, then a prudent investor should be willing to pay \$100 for the right to receive \$10 annually. The formula for calculating present value (PV) from a stream of revenues (R_i) in each of n years is:

$$PV = \sum_{i=1}^n \frac{R_i}{(1+r)^i}$$

where r is the rate of interest.

represent the purchase and sale of this "property."

The player reservation system as practiced by sports leagues is a classic case of a restraint of trade through the division of markets and agreements not to compete, and as such is a textbook example of a violation of the antitrust statutes. Although leagues maintain that these restraints are reasonable—an issue we shall explore when we consider the industry's conduct and performance—all standing court precedents conclude that they are anticompetitive.

Only baseball has specifically had its player reservation system exempted from antitrust prosecution. This exemption dates from the days of the Federal League which attempted to become a third major league just prior to the outbreak of World War I. The Federal League was frustrated in this effort by the reserve clause, which prevented its acquisition of established major league players. In an ensuing antitrust case the Federal League attempted to undo the reserve system.— The court ruled that baseball was exempt from

— Federal Baseball Club v. National League, 259 U.S. 200 (1922).

antitrust prosecution because it was not engaged in interstate

commerce and, therefore, was beyond the scope of federal regulatory law. Interestingly, the district court judge in the case was Kenesaw Mountain Landis who became Commissioner of baseball shortly thereafter.

The second attack on baseball's reserve clause was launched in the late 1940s when another league, this time in Mexico, tried to attain major league status. Major league baseball could not enforce its reserve clause in Mexico, but it did rule that players signing with the Mexican League would forever thereafter be barred from American organized baseball. Two cases emerged from this action, but one never came to trial as baseball lifted its suspension of the plaintiff player. In the other case, the Supreme Court steadfastly

— Gardella v. Chandler, 172 F. 2d 402 (2d Circuit 1949).

stuck to the baseball exemption, although it disagreed with the earlier decision. The Court found unacceptable the earlier ruling

— Toolson v. New York Yankees, 346 U.S. 356 (1953).

that baseball was not interstate commerce, but took Congress' subsequent failure to reverse the Court by specifically incorporating baseball into the coverage of the antitrust statutes as an implied Congressional exemption of the sport. The Court also ruled that to

reverse itself more than thirty years later would be unfair to investors who had entered the industry expecting the antitrust exemption to remain.

The third major challenge to the reserve clause was offered by Curt Flood, "a grand little center fielder" for the St. Louis

— According to columnist Red Smith, New York Times, June 21, 1972.

Cardinals, who decided to retire to Majorca rather than play in Philadelphia, the city to which he was traded by the Cardinals. Once again, the Supreme Court upheld the exemption, although this time it removed yet another reason for its support—that investors deserved a consistent policy. The Court recognized that having enjoyed

— Flood v. Kuhn, 407 U.S. 258 (1972).

monopoly rights in the past is no argument for continuing to enjoy them in the future; however, the Court continued to pass the buck by arguing that Congress had had over fifty years to reverse the Court if it had seen fit to do so.

This last reed upon which the baseball exemption is based is weak, indeed, and a good candidate for future reversal. (In fact, William O. Douglas, who voted with the majority in Toolson, switched

sides in the five-to-three Flood decision.) The failure of Congress to act is not equivalent in content to the passage of a specific exemption since it could have numerous explanations. The failure to enact an exemption could stem from an implicit decision in Congress to concern itself with more important matters than overturning a bad Court decision in an economically unimportant industry. Congress has exempted numerous business activities from antitrust liability, including agricultural marketing cooperatives and most regulated industries. Thus the Court could just as easily conclude that the failure of Congress to act implies that it is less enthusiastic about a baseball exemption than about all the other exemptions that have been enacted. Finally, the Court itself does not follow this line of reasoning in other cases. Many major Supreme Court decisions--school desegregation; one-man, one-vote; the rights of those arrested--are reversals of earlier Court decisions to which Congress made no response.

In other sports, the courts have been unwilling to exempt player reservation systems from antitrust liability. The National Football League (NFL) employed a baseball-like reserve system until it lost an antitrust case,[/] adopting the Rozelle Rule thereafter as

[/] Radovich v. National Football League, 352, U.S. 445 (1957).

another mechanism to achieve the same economic effect. Recently the NFL was successfully challenged again, with the Rozelle Rule the focus

of the dispute.[/] In the Kapp case, the judge found the NFL's

[/] Kapp v. NFL, U.S.D.C. Northern California, C-72-537 and Mackey v. NFL, U.S.D.C. Minnesota, C-4-72-277. Decisions about the legality of the Rozelle Rule were handed down in 1975; however the issue will not be resolved until the owners exhaust their opportunities for appeal.

player reservation system in violation of the antitrust statutes. The Mackey case involved thirty-two players who had played out their options. The court ruled that the Rozelle Rule was an illegal collusive agreement to prevent competition for their services. In hockey, the baseball-like reserve system was found illegal in a 1973 decision;[/] hockey has subsequently instituted the option system.

[/] Philadelphia World Hockey vs. Philadelphia Hockey, cited above.

In basketball, Oscar Robertson, acting in his capacity as President of the National Basketball Association Players' Association, filed an antitrust suit that challenged the NBA's counterpart to the Rozelle Rule.[/] Just before the case was to go to trial, it was settled out

— Robertson, et al. v. NBA, et al., U.S.D.C. Southern District of New York, 70 Civ. 1526.

of court when the NBA agreed to abandon temporarily the compensation payment when a player signed with a new team and to make the future compensation system a mandatory bargaining issue with the players' association. Finally, over one hundred soccer players have launched an antitrust suit that seeks to ease the restrictiveness of the player reservation system of both the North American Soccer League and the international governing body of soccer, the Federation Internationale de Football Association.—

— Kerr, et al. v. NASL, et al., U.S.D.C. District of Minnesota, Civil No. 4-78-560.

Even though baseball has succeeded in retaining its antitrust exemption, the players nevertheless succeeded in obtaining what has proven to be the most liberal system for allowing veterans to offer their services in a competitive market. In a collective bargaining agreement signed in the early 1970s, baseball agreed to have contract disputes between a player and his team settled by compulsory arbitration. Soon thereafter, two pitchers, Dave McNally and Andy Messersmith, allowed one full year to pass without signing their contracts. They then asserted that they were free agents, arguing

that a team's negotiating rights to a player were not permanent. The labor arbitrator who was assigned to resolve this contract dispute ruled that the players' interpretation of their contracts was valid, and declared them to be free agents. Subsequent court challenges by the owners failed to overturn the decision.

This ruling put the baseball players in a very strong bargaining position with the owners, and thereby led to the virtual decimation of baseball's player reservation system for veteran players. The players' union and the owners subsequently negotiated the present system whereby six-year veterans can play out their options and become free agents.

The gains in the other sports from victories or settlements in antitrust actions have not been so dramatic. The Rozelle Rule system of compensation for the signing of free agents has succeeded in keeping down the number of free agents seeking to switch teams in all sports, as have the multiyear option periods in hockey and soccer. Player unions have succeeded in making the player reservation system a mandatory collective bargaining issue, so that the possibility of player strikes lies behind demands for greater competition in the player market. And in the future as in the past, player unions are an effective vehicle for organizing and financing court challenges to league practices. Obviously, player unions have become a major force in sports, and their rise to power is a topic that requires further examination.

Player Unions

The recent wave of court cases attacking the player reservation system is due in large measure to the rise of player unions. In the mid-1960s, players in all sports except soccer began to build effective, militant players' associations. The soccer union began to develop a decade later. Although these organizations do not focus on the use of collective bargaining to establish individual salaries, ¹ in every other respect they seek the same

¹ The only wage issues normally included in collective bargaining in sports are the salary minimum for a major league athlete, the proportionality factor between a player's option year salary and his salary in the prior year, and the maximum percentage reduction in salary a team can offer.

objectives as other labor unions. Generally the unions have been active in seeking institutional changes within sports that improve the bargaining position of players in the salary negotiation process. Antitrust attacks on the player reservation system have been financed by player associations, notably the Flood, Mackey, Robertson, and Kerr cases mentioned above. In addition, player associations have sought, and in hockey and baseball have obtained, arbitration of salary disputes.

In salary arbitration, a player and his team each make "final" salary offers. An arbitration board, selected by labor and management, then picks one or the other figure (but no other--i.e.,

they cannot set a salary other than one of the two proposed by the parties). The arbitration board is instructed to make its decision on the basis of the earnings of other players of comparable ability and experience in the sport, and not to consider the particular financial condition of either the player or his team.

Salary arbitration does not eliminate monopsony in the player market, for as long as players, on average, are paid a monopsony wage, arbitration by a single player cannot lead to his procuring a competitive wage. But the structural impact of arbitration is still important, since it eliminates the possibility of a team behaving as a discriminating monopolist. Each player can be said to have a "reservation salary" below which he will either retire from sport or give his team less than his full playing effort. With a monopsonized player market, a team has the market power to pay the player only his reservation price in order to obtain his services. Consequently, two players of equal ability and experience but differing reservation prices could be paid different wages. An arbitration procedure, with results based upon the average relation between pay and performance, provides a salary boost to a player whose reservation price is low.

A second accomplishment of player unions has been to obtain the right of players to be represented by agents. In the past, teams refused to negotiate with anyone other than the player himself. Now players can be represented by professional agents who are knowledgeable about the general pattern of salaries in sports and who are skilled negotiators. This, too, protects against teams who wish to use monopsony power and a player's weak bargaining skills to force

a player's wage down to his reservation price.

National Broadcasting Rights

Rights to broadcast sports contests are sold in two markets. In one, leagues sell to national networks the rights to national broadcasts, while in the other, individual teams sell the rights to games that are not broadcast nationally to broadcasters in the area around the team's home city.

Two key institutional rules in professional sports govern the structure of the broadcasting market. The first is the granting to a team of exclusive control over broadcasts of any team in the same league within its home metropolitan areas. This prevents a team in one city from broadcasting its games into the home area of another team.

The second major institutional arrangement in broadcasting is the Sports Broadcasting Act of 1961,¹ which exempted leagues from

¹ P.L. 87-331 (75 Stat. 732).

antitrust prosecution if they chose to sell national broadcasting rights on a league, rather than team, basis. The Sports Broadcasting Act was passed by Congress after a series of court cases had made sports broadcasting competitive. These decisions held illegal league-wide national broadcasting contracts, the league rule prohibiting radio broadcasts into another team's territory, and the

rule prohibiting television broadcasts into the team's home city on days when the home team was not playing or playing in another city. All that the courts were willing to permit were blackouts of telecasts when the home team was at home—a practice overturned by Congress in 1974 for sell-out games.

For a few years in the late 1950s, national broadcasting rights were sold competitively. Four networks were formed to offer professional football, three involving NFL teams and one involving the AFL. Two competitive national broadcasts of major league baseball were offered twice weekly, one focusing primarily on the Yankees during their heyday but also involving four other teams, and another involving most, but not all, of the remaining teams.

Within a few years after the passage of the Sports Broadcasting Act, all national broadcasting contracts in sports were negotiated with leagues. In football, the national contract has come to dominate telecasts: all NFL regular season and playoff game rights are now sold by the league to national networks. Only radio broadcasts and pre-season telecasts are controlled by individual teams. In other sports, though local rights are still important, fees from league sales of national rights have grown in importance. In baseball, for example, national rights constituted less than 20 percent of total broadcast revenues in 1955. By 1970, 47 percent of revenues from broadcasting came through national contracts.²

² Ira Horowitz, "Sports Broadcasting," in Roger G. Noll, editor, Government and the Sports Business, Brookings Institution,

1974, p. 287.

The switch from teams to leagues as the source of national contracts profoundly affected the structure of the national broadcasting rights market. Prior to that act, in each sport between six (hockey) and twenty-four (football after the emergence of the AFL) teams were potential sellers of broadcasting rights. On the demand side, three large national networks plus a fourth loose federation of independent stations were potential buyers. After the Act was passed and subsequent mergers were completed, only one entity was selling rights in each sport, a potentially dominating position for the leagues when confronting even as tight an oligopoly as the national television networks.

The financial consequences of the law were predictable: much greater broadcasting revenue for sports enterprises. The first broadcasting package negotiated by major league baseball after the passage of the act, when all other national contracts had finally expired, went into effect in 1965; it approximately tripled the national broadcasting revenues of the sport over the previous few years, from \$2 million to \$6 million spread among twenty teams. In football, the first league-wide contract negotiated by the NFL went into effect in 1964. It raised broadcasting revenues per team from \$383,000 to \$1,061,000.¹ Obviously, the antitrust exemption of the

league-wide package conferred an important monopoly advantage.

Although the new contracts called for the broadcast of fewer games than had been telecast in prior years, revenues jumped dramatically. Meanwhile, local broadcasting revenues in baseball continued their annual growth of about 8 percent per year—even though the number of games available for local broadcast had increased with the reduction in national telecasts from four per week to one.

Another piece of evidence illustrating the monopoly power of sports leagues can be found in comparing the profitability of rights to broadcast sporting events with the profits of suppliers of other types of television programming. The bargaining power of suppliers of sports broadcasts can be compared to that of suppliers of conventional programs by examining the division of economic rents between broadcasters and both kinds of program suppliers. The economic rent is the difference between the advertising revenue of a program and the costs, including a competitive rate of profit, of producing and broadcasting the program. Given its cost structure, the maximum a network can pay for a sports broadcast and still earn a normal profit (a rate of return on investment of 12 percent after taxes) is about 45 percent of the advertising revenue generated by the program; leagues actually pay an average of 38 percent for national rights. For regular series in prime time, the maximum the network could pay is 50 percent of revenues; in fact, series average about 40 percent.²

¹ Horowitz, pp. 287-288.

_/ Roger G. Noll, Merton J. Peck and John J. McGowan, Economic Aspects of Television Regulation, Washington, D.C.: The Brookings Institution, 1973, Ch. 3 and Appendix B.

Producers of series programming incur production costs for programs equal to about 32 percent of broadcasting revenues, so that 8 percent of revenues are rents for producers while 10 percent are rents for broadcasters. The cost to the sports enterprise of allowing its game to be telecast is effectively nothing--that is, the entire rights fee is a net increment to revenue._/ Hence, about

_/ It is often alleged by sports entrepreneurs that the televising of games in the same area where that game or even another game is being played will hurt the gate at the latter. If so, broadcasts would have a cost to a team equal to the decline in net gate receipts that they caused. After analyzing the available data on this issue, Horowitz concludes: "On balance . . . it is by no means obvious that, over an extended period of time, telecasts--even of home games on a selective basis--have hurt, or would hurt, gate receipts" (p. 286).

8 percent of revenues are rents for broadcasters, while perhaps 30 percent are rents for teams. Thus, sports enterprises, by bargaining as a unit for national rights, essentially neutralize the tight

television network oligopoly. They capture about 80 percent of the economic rent generated by the broadcast, compared to the capture of less than half the rent by series producers.

It is difficult to find a more clear-cut example of monopolistic rent than the revenues sports leagues receive from national broadcasting rights. Furthermore, this monopoly rent owes its presence to explicit government action--the legalization through the Sports Broadcasting Act of a cartel arrangement to sell broadcasting rights.

Admissions, Concessions and Local Broadcasts

The market for admissions to home games, including the concession sales that accompany admissions, is essentially a local one. The Baltimore Orioles once surveyed the fans attending their home games during a season, and found that approximately 75 percent lived within forty-five minutes' driving time of the stadium._/ In an

_/ Baltimore Baseball Club Survey: 1954, Baltimore Orioles, 1955.

antitrust suit tried in 1975, the Oakland Raiders, San Francisco 49ers and Washington Redskins revealed that between 80 and 90 percent of their season tickets--which account for virtually all tickets sold for all three teams--were sold to residents of the metropolitan area in which the team played._/ Even out-of-town ticket sales are not

/ Hecht v. Pro-Football, Inc., U.S.D.C. for District of Columbia, CA 2815-66.

necessarily transacted in a national or regional market, since visitors may be in a team's city for reasons other than the desire to attend a game, or distant firms may acquire tickets to entertain clients in the team's home city.

Although the admissions market is primarily local, nevertheless teams in three sports have a substantial interest in the home attendance of other teams. In baseball, football and soccer the visiting team is paid part of the gate, receiving between 10 and 20 percent in baseball, 40 percent in football, and 25 percent in soccer. In all sports, the costs of league operations are paid out of a fixed percentage assessment of gate receipts, so that the more successful teams pay a higher proportion of league costs than do the weak franchises. As a result, league members have some interest in investigating the market potential of proposed locations of new or relocated teams.

Part of the market for broadcasts of games is local or regional. While national telecasts of selected games are offered in all four major sports, in all but football the sale of rights for local and regional broadcasts can be a more important source of revenue than the sale of national rights. In the early 1970s in baseball, for example, teams received roughly \$400,000 each as their

share of national broadcasting revenues, but averaged nearly \$1,000,000 each from local broadcasts (leagues capture another \$450,000 per team from special events such as the All-Star game and World Series, but much of this goes to the players and their pension fund). The Los Angeles Dodgers received \$1.8 million for local broadcasting rights, more than four times their share of national revenues. /

/ Horowitz, p. 291.

In the admissions and local broadcasting markets, a team faces only a few competitors, and these usually offer imperfect substitutes for the team's product. Five out of six major league teams enjoy a local monopoly in their sport. The remaining teams have only one competitor. In all sports either professional teams in the minor leagues in the same sport, pro teams in other sports or amateur teams--high school and college--create some additional competition. Of course, obvious differences in the quality of play and the focus of fan loyalties make amateur and minor league sports an imperfect competitor for the major leagues. In addition, the amateurs and the pros try to avoid temporal competition. Generally, the amateurs schedule most games on Fridays and Saturdays, while the pros concentrate more on Sunday and the middle of the week, a tactic intended to avoid competition for attendance at games, for broadcasting audiences, and between attendance at amateur contests and

broadcast audiences for the pros.

Competition among pro teams in different sports is minimized by the seasonality of each. While all sports overlap somewhat in their playing schedules,[/] only hockey and basketball are in direct

[/] At the league level, the decision to overlap seasons is conscious; presumably both major league baseball and the NFL could reduce the duration of their seasons by two weeks and produce a monopoly for each for part of September. That they choose not to do so may reveal an inability to coordinate strategies, but more likely it reveals a relatively low degree of competition between the sports.

competition during their entire seasons.

On the demand side, the number of people who attend games is a surprisingly small fraction of the population. The Baltimore Orioles survey found that in a year in which the Orioles drew over one million fans, fewer than 100,000 different people attended a game. In attendance at the typical game during the eighty home dates would be a few thousand season ticket holders, a few thousand regular fans who attend several games a year, and only a few hundred individuals who attend a game once or twice a year. In football, where NFL teams draw about 400,000 fans during the regular season, nearly all seats are sold as season tickets, so that even taking account of the sharing of season tickets it is unlikely that more than 80,000 different individuals will attend a home game of most teams during a season. In

hockey, basketball and soccer the numbers are even smaller. These teams average 5,000 to 20,000 per game in attendance, with between half and all of the attendance accounted for by season tickets. Since most metropolitan areas that contain major league teams range in population from two to six million, it follows that for most teams only a few percent of the residents of its home city ever attend a professional game.

Such is not the case when it comes to sports broadcasts. In most cities, a single radio or television broadcast of a game will reach more people than will attend the game in person in an entire season. And here audience shares, particularly of telecasts, are sufficiently large that simultaneous broadcasts by two teams in different sports would directly compete in that each would have a significantly smaller audience than if the broadcasts were not simultaneous. Consequently, teams and leagues try to avoid simultaneous broadcasts. Scheduling differences and the effects of the division of the nation into time zones mean that teams located in the same city, whether in the same or different sports, usually do not play at exactly the same time.

Structural Spillovers from Sports Broadcasting

The demand side of the market for broadcasting rights as seen by a team or league is not the broadcasting audience, but radio and television stations and advertisers. In most cities, numerous radio stations make the market for radio rights competitive; however, few cities have more than a handful of television stations, and no city

has more than a few VHF stations. For various technical reasons, a program will draw about twice as large an audience on a VHF station as it will on a UHF station. Since the advertising revenue captured by a broadcast is proportional to the size of its audience, a VHF station can always outbid a UHF station if it chooses to enter the competition for broadcasting rights.

Advertisers of both national and local sports broadcasts are usually large firms in oligopolistic industries in which nonprice competition can confer market advantages. The majority of major league games, national and local, are sponsored by a brewery, an oil company, a firm in banking and finance, and an automobile company. Prior to the ban on cigarette advertising, a majority of teams were sponsored by a tobacco manufacturer as well. Other industries with firms that sponsor broadcasts are soft drinks, insurance, airlines, tires, cosmetics and shaving products.✓

✓ Horowitz, pp. 312, 316.

Two aspects of sports sponsorship are important. First, although sponsors tend to be large, oligopolistic firms, the number of industries from which they are drawn is sufficiently large that the demand side of the advertising market is competitive. Second, to the extent that sports advertising is a unique product, in a given sport the local monopoly enjoyed by a team and the national monopoly possessed by a league confer a competitive advantage on a single

advertiser. For example, when the New York Mets were organized, their broadcasting rights were sold to the brewers of Rheingold beer. In the next few years sales of Rheingold in the New York market overtook and passed sales of Ballantine, the sponsors of the then-fading Yankees.✓

✓ Horowitz, p.315.

The benefits of this kind of market boost are not necessarily to the sponsors of sports broadcasts. The team or league, being one of a few sources of sports broadcasts, is in a position to capture most of the benefits advertising confers on the sponsor and the broadcaster, especially the radio broadcaster, since radio, too, is competitive. A VHF television station or a national network, being one of a few possible outlets for televised sports, is also in a position to capture some of these benefits.

Facilities

The market for facilities in which to stage contests is also local, although less so for a team than for the owner of a facility (usually a local government). Obviously, a stadium or arena cannot be moved to another city; a team, however, has some freedom to move, and hence competition among facilities for a team is a possibility. Although facilities available for sports have other uses, few are fully utilized—especially the stadiums used for football and

baseball. As a result, even if the local market for a facility is a bilateral monopoly, the balance of bargaining strength favors the team. On several occasions teams have moved, or used the threat of moving, as a device for obtaining better rental bargains. For instance, after losing the Braves to Atlanta, Milwaukee County Stadium attracted the then-Pilots, now Brewers, from Seattle by offering to charge only \$1 annual rent for the first million admissions sold. Similarly, RFK Stadium in Washington, D.C. tried to keep the Senators baseball team, and later to attract the San Diego Padres, by offering attractive rental agreements.

The consequence of intercity competition for baseball and football teams is that nearly all stadiums lose money. During the 1970-71 season, twenty publicly-owned baseball and football stadiums for which financial information was publicly available lost a total of over \$8 million, with most of the loss accounted for by the stadiums built in the ten years immediately preceding the survey.¹ This is a

¹/ Benjamin A. Okner, "Subsidies of Stadiums and Arenas," in Noll, Government and the Sports Business.

predictable result, given the structure of costs of a sports facility. Most of the costs of a stadium, once it has been built, are fixed. Regardless of the extent of use of the facility, interest on bonds must be paid and maintenance of the field and seats must be continued at some minimum level. As long as there are more facilities than

teams to play in them, competition among stadium authorities will force rents down to the point at which they cover only the costs of staging contests. Operators of facilities owned by local governments may be willing to accept even lower rents, since they will consider the effect on tax revenues of keeping a team in the city in calculating the minimum rent they are willing to accept.

Barriers to Entry

In principle, two kinds of competitive entry into sports are possible. A local monopoly could be broken by the entry of new teams, and a national monopoly enjoyed by a league could be eroded by the formation of new leagues. The latter could lead to entry in local monopolies if new leagues choose to locate in the home towns of established teams.

In practice, with few exceptions entry has taken place only in the form of competitive leagues, for league rules prevent most forms of competition among their members. With two major exceptions, expansion franchises in a major league have never constituted economically meaningful entry: they normally have been located in cities previously lacking a member of the expanding league, and the teams have participated in the broadcasting and player policies that preclude interteam competition in those markets. To illustrate why entry must be through new leagues, we will begin by examining the barriers to entry in a particular locality.

The presence of local monopoly in admissions, local broadcasts and facilities has two possible causes. First, the monopoly may be

natural in that only one or two teams in a particular sport are economically viable, given the cost and demand conditions in the market. Second, institutional barriers may preclude entry.

The previous analysis of the various sports markets surely suggests that institutional barriers are important. Membership in a league confers upon a team "territorial rights." The details differ from sport to sport, but the effect of these rights in all cases is to protect a member against facing direct competition in its home city. No other team in the league is permitted to schedule games or broadcasts of games in another league member's home city without the approval of the home team.

These rules do not totally rule out the entry of a second team into a city. The Los Angeles Dodgers, for example, were paid an indemnity by the California Angels when the American League placed the Angels in the Dodgers' home territory. And when the NFL and the American Football League merged, the San Francisco 49ers and the New York Giants were indemnified for granting NFL membership to their competing AFL teams, the Oakland Raiders and the New York Jets. Furthermore, new competitors can be introduced when a new league is formed without approval from or compensation to established teams in other leagues.

The territorial rights do, however, constitute a potential barrier to entry for several reasons. First, since a home team must give its approval if its market is to be shared, the costs of entry are increased by the requirement that the established team's acquiescence be purchased. Second, territorial rights in broadcasting

reduce the potential revenue of other teams by denying them the possibility of selling broadcasting rights in the territory of another team, such as selling rights to broadcast a home game in the visiting team's home town.

In 1980, territorial rights were placed in jeopardy by the attempt of the Oakland Raiders of the National Football League to move to Los Angeles. The Raiders announced the move without first seeking league approval. When the other owners and the league commissioner expressed disapproval, the matter moved to the courts, where resolution of the issue is pending at this writing. The Raiders and their potential new landlords, the Los Angeles Coliseum Commission, claim that league rules inhibiting the transfer of the franchise are an antitrust violation. On purely economic grounds, their claim has merit, for surely if the San Francisco metropolitan area can support two football teams, so can the much more populous Los Angeles area.

Entry even into markets with no major league team can be forestalled by a monopolistic league. Each league has a set of formal procedures for deciding whether a new team will be admitted. One requirement is that a very large majority of existing league members (typically three-fourths) agree to admit another team. Another is a similar vote among the membership to determine the price of entrance.

In all cases the price is expressed as a franchise fee, usually small, plus another price at which existing teams will sell the newcomer the rights to certain veteran players, usually the players that rank in the bottom half or third in terms of playing ability. The league will also require that the new entrant buy a

certain number of players from each member. The reasons for this rather complicated mechanism for establishing new teams are, for the most part, derived from the tax laws. According to past Internal Revenue Service practice, a team can deduct as a depreciation expense the amount spent on players, but not the amount paid for a franchise, during the few years after the team is purchased. These noncash depreciation expenses can be deducted from other income to determine income tax liability. The ultimate effect of this tax treatment is that the federal government ends up paying for 50 to 70 percent of the cost of a team through reductions in the tax liability of team owners.┐

┐ For more details, see Benjamin A. Okner, "Taxation and Sports Enterprises," in Noll, Government and the Sports Business, Ch. 6.

In addition, leagues are usually organized as nonprofit entities, which are not allowed to pay dividends to their owners, the teams. In order to maintain their nonprofit status the expansion revenues must go directly to the teams in the league, and not pass through the league. Even if leagues were for-profit corporations, payments directly to teams avoid the income taxation that would be levied on a league if it received expansion payments which were then divided among the members as dividends.

League rules for creating new teams guarantee that nearly all members must be satisfied with the terms on which an expansion

franchise is granted, and thereby enable the league to behave as a monopolist in selling membership. Without the near-unanimity requirement, in a year in which several teams faced severe economic hardship a league might sacrifice long-term profit maximization and vote for the admission of several new teams in order to raise capital. The possibility of this happening, however, is lower if the number of teams that must acquiesce to it is greater.

Monopolization of expansion franchises, like any other monopoly, leads to a slower rate of expansion at a higher price per franchise than is warranted by market conditions. It also serves to maintain high prices for existing teams. Thus, some viable markets can be expected to be without franchises. Nevertheless, the extent to which leagues can husband franchises to maximize financial gain is limited by the threat that a competitive league can be formed.

The possibility of a new league being organized is not a tight check on the monopolistic position of teams and leagues. First, the formation of a successful new league is possible only if several cities possess an excess demand for a particular professional sport. If the number of such cities is too few to constitute an entire league, permanent monopoly rents can accrue to teams in markets big enough for a new entrant to succeed and to all members of a league from slow expansion at high franchise prices. Second, if a league can enforce its player reservation system against a new league, the entrant does not have access to established major league stars. As a result, the start-up costs associated with attaining major league status in the eyes of the sports fan are increased, for the league

must develop its own stars from among the ranks of amateurs and minor league professionals.

When baseball had a perpetual reserve clause, it succeeded in enforcing it against new entrants, so that new baseball leagues could not hire any player who was playing pro ball at any level when the league formed as long as the established leagues wanted to retain him. All other sports have succeeded in requiring new entrants to honor the clause in player contracts requiring an option year before the player can change teams, although a team in the new league need not compensate the old for signing players who have played out their option. For example, the Memphis team in the World Football League succeeded in signing three star players from the Miami NFL team, but obtained their services only after they had played out their options with Miami.

A final institutional mechanism that has been deployed to forestall entry is the exclusive rental agreement to obtain a stadium. One of the original owners of a World Football League franchise wanted to locate his franchise in Washington, D.C., where the NFL Redskins play to full capacity and have a waiting list several thousand long to obtain season tickets. This team eventually settled in Florida because it was unable to secure an adequate playing facility in the Washington area. Only two stadiums large enough to accommodate a major league football team are located in the Washington metropolitan area: RFK Stadium, the home of the Redskins, and the University of Maryland stadium. The latter is unavailable for professional contests, and the former, by agreement with the Redskins, is available

for professional football only if the Redskins approve.

In 1966, an antitrust suit was filed in an attempt to break the exclusive lease between the Redskins and the operators of the stadium. / The purpose was to permit the holder of the D.C. franchise

/ Hecht v. Pro-Football, Inc.

in the AFL to locate his team in Washington. The defendants were the Redskins, the NFL, and the D.C. Armory Board, the operator of RFK Stadium. The initial decision in the case was that the lease was not an antitrust violation, but the appeals court ruled that the judge had made reversible errors and ordered a retrial. Before the retrial began, the NFL settled the case out of court by offering the plaintiff a large amount of cash on the condition that the amount not be revealed. Thus, the antitrust status of exclusive leases on stadiums remains unresolved.

Because stadiums generally lose money, a new entrant faces a significant absolute cost barrier if it must construct its own playing facility. Only if a local government authority is willing to build a second money-losing facility—in spite of excess capacity in the first—can this barrier be eliminated when the incumbent team has an exclusive lease. Presumably the political demand to obtain a second team in a sport—particularly in a new, untried league—is likely to be less than the desirability to voters of attracting the first major league team. To build a facility requires either the passage of a

bond issue or the election of politicians willing to commit taxes to guarantee that the expenses of constructing a stadium will be paid. Since only a small proportion of voters actually attend games, the source of majority-rule approval of financing these money-losing ventures must lie in the presumed benefits to a city of acquiring "major league" status.— This perceived benefit is not available

—/ For a discussion of these benefits, see Okner.

as an argument for obtaining a second team, which makes it more difficult to obtain political approval of additional facilities.

Is the Sports Monopoly Natural?

The preceding discussion leads to the conclusion that institutional impediments could foreclose economically warranted entry. Whether entry is foreclosed depends upon an assessment of cost and demand conditions in sports, and, in particular, examination of the possibility that teams are natural monopolies.

The precise definition of natural monopoly is more complicated than is needed for the purposes of this chapter; suffice to say that a monopoly is natural if indivisibilities in the production process make it impossible for more than one firm to earn nonnegative profits in a market.

In sports, the production function describing the "technology" of operating a sports franchise has definite indivisibilities. League

rules, which no individual team can change, dictate the minimum number of players a team can field and the number of games per season a team must play. Furthermore, because a team must be reasonably competitive athletically to generate fan interest, the general playing quality of a league determines a minimum feasible quality for each team. Finally, a league member is committed to pay the costs associated with transporting team members to other cities to play away games. Failure to satisfy any of these minimum requirements for league membership—including the requirement to field a respectable team—will cause a team to be expelled from the league.

In the short run, the minimum expenditure commitment of a team is a very high percentage of its total costs. Table 1 shows approximate costs of teams in the major sports, broken down by expenditure categories, for the early 1970s.— League rules require

—/ No comprehensive data have been assembled since; however, revenues in 1980 probably were at least double those shown in the table, and player costs were probably three times as high. In soccer, revenues average about a half-million dollars per team, player salaries average a very low \$10,000, and most teams lose money, but no more than a few hundred thousand dollars a year.

that a player receive his full contractual salary if he is not released from the team before a relatively early date in the playing season, so that in the short run player costs are fixed. Over the

TABLE 1
Income Statements of Average Teams by League

(figures in thousand of dollars)

League	NBA	NFL	MLB	NHL
Year	1971	1970	1969	1973
Operating Revenues	1,760	4,850	5,225	4,150
Games	1,200	2,700	3,200	3,450
Broadcasts	360	1,850	1,420	550
Other	200	300	605	150
Direct Costs	1,815	3,350	4,955	2,750
Player Compensation	700	2,000	1,070	1,000
Games	600	950	1,190	1,350
General and Administrative	340	350	1,375	225
Promotion	175	50		75
Player Development	0	0	1,320	100
Operating Profit	-55	1,500	270	1,400
Other Income	55	200	n. a.	100
Cash Flow	0	1,700	270	1,500
Indirect Costs	435	600	445	500
Player Amortization	370	500	445	500
Interest	65	100	n. a.	n. a.
Book Profit Before Taxes	-435	1,100	-175	1,000
Benefit of Ownership After Taxes	217	1,150	357	1,000

n. a. = no basis for estimate

Source: Summaries of tables in Roger G. Noll, "The U. S. Team Sports Industry: An Introduction," in Roger G. Noll (ed.), Government and the Sports Business, Brookings Institution: Washington, D. C., 1974. Details of estimates and sources of information are presented in these tables.

Note: Except for the last line, figures are estimates of teams of average quality for each league. Each league has a few teams that do much better and a few that do much worse financially than these averages show. The "Benefit of Ownership" calculations assumes that the owner of the team is in the 50% marginal tax bracket for federal income tax and that he has sufficient other income to take advantage of the tax write-off possibilities of any book loss the team might experience. Most owners are probably sufficiently wealthy that their marginal tax rate is at least 50%.

Definitions: Player compensation includes wages, fringe benefits and the present value of deferred salaries for players, coaches and managers. Game costs include rents, maintenance of playing field, equipment, training camps, travel and other expenses associated with staging contests. Player development refers to subsidies of amateur and minor professional leagues.

League Key: NBA, National Basketball Association; NFL, National Football League; MLB, Major League Baseball; NHL, National Hockey League.

course of a few years, salary costs can be reduced somewhat, but the requirement that a representative team be fielded places limits on this. Within a league, the teams with the biggest salary expenditures will spend between two and three times as much as the teams with the lowest salaries; hence it is unlikely that any team could cut its salary budget below half of the league-wide average.

Of the remaining costs, only rent on a stadium and payments to the league to pay common expenses, such as referees and umpires, are typically based on revenues and therefore not subject to minimum bounds. Rents vary from 5 to 20 percent of revenues for all but a few teams, and league payments are another 5 to 10 percent. Together these rarely total more than 25 percent of costs. Consequently, on a year-to-year basis 75 percent, and in the long run more than half, of the expenditures of a team represent minimum, indivisible commitments required to continue in business.

To determine whether cost indivisibilities in sports are sufficient to cause natural monopoly requires two additional pieces of analysis. The first is to calculate the minimum profit a team must earn in order to stay in business in the long run. The second is to examine the demand conditions in each sport to determine how many teams are viable in each market.

Determining "normal profits" in sports is horrendously complicated because of the extremely labor-intensive production method in the industry. The typical balance sheet of a sports enterprise lists almost no tangible capital investments, nor are its net assets likely to be even close to a reasonable approximation of the sales

value of the enterprise. Consider the financial statement of the Milwaukee Bucks basketball team for 1970 (Table 2). The entire investment of the team in tangible, physical capital is \$21,000 in furniture and fixtures, ignoring whatever may be the investment in the subsidiary (a summer camp). The items listed as "NBA Contracts" on the asset side of the ledger are payments due from expansion teams as part of the fee for joining the league; on the liability side these are payments due other teams for the expansion that granted the Bucks a franchise. Entries relating to employment contracts represent a bookkeeping practice by the team to capture certain tax advantages. If a player is signed to a multiyear contract that calls for part of his salary to be deferred, the team can deduct the deferred payment at the time the obligation is accrued if the team "funds" the deferred payment. What this means is that if a player, as part of his contract for this year, is to be paid \$10,000 twenty years from now, a team that invests the \$10,000 in certain low-risk investments can deduct the deferred payment this year in computing its tax liabilities and, meanwhile, earn the interest payments on the investment.

Another major asset of the team is termed "Original Player Costs." This represents the current value of the player contracts purchased by the Bucks during the expansion in which they obtained their franchise. Once again, this reflects an accounting practice designed to take advantage of the tax ruling that enables a team to depreciate the cost of a player contract over the expected playing career of a player, which is normally taken to be five years. In 1970, the Bucks claimed about \$270,000 in player depreciation, which,

TABLE 2

MILWAUKEE BUCKS BALANCE SHEET

Current Assets

Cash, Investments, Accounts Receivable and Prepaid Expenses	\$2, 389, 356
Current Maturities of NBA Contracts Receivable	117, 857
Deferred Costs of Employment Contracts	644, 700
Total Current	\$3, 151, 913

Long Term Assets

NBA Contracts Receivable	\$ 353, 572
Deferred Costs of Employment Contracts	1, 216, 667
Furniture and Fixtures	21, 014
Original Player Costs	885, 124
Subsidiary Assets	18, 523
Certificates of Deposit	750, 000
Total Long-Term	\$3, 244, 900
Total Assets	\$6, 396, 813

Current Liabilities

NBA Contract Payable	\$ 250, 000
Accounts Payable, Accrued Liabilities and Advance Revenues	1, 069, 938
Employment Contracts Payable	514, 989
Total Current	\$1, 834, 927

Long Term Liabilities

NBA Contract Payable	\$ 250, 000
Employment Contracts Payable	1, 345, 833
Deferred Taxes	137, 000
Total Long-Term	\$1, 732, 833
Total Liabilities	\$3, 567, 760

Shareholders' Equity	\$2, 829, 053
Total Liabilities and Equity	\$6, 396, 813

Source: Milwaukee Professional Sports and Services, Inc., 1970 Annual Report.

given corporate income taxes of about 50 percent, reduced their income tax liability by about \$135,000.

The importance of player depreciation on after-tax profits can be seen by analyzing the income statement of the San Diego Padres, one of the less successful baseball franchises. Table 3 shows the principal sources of revenues and cash expenses for the Padres. According to these figures, the Padres lost about \$500,000 in 1979. But this does not take account of the write-off of the portion of the original purchase price of the Padres that was allocated to player contracts. Although this amount is not known precisely, if the Padres followed practices common in sports the annual amount of player depreciation claimed would be at least \$1,000,000. Thus, the book loss of the Padres would be \$1,500,000, which could then be deducted from the personal income tax returns of the owners, in this case Ray Kroc, who also owns the MacDonald's chain of fast-food restaurants. Assuming that the marginal tax rate of the Kroc family is 50 percent, then ownership of the Padres reduced their tax liabilities by \$750,000, converting the \$500,000 cash-flow loss into a \$250,000 after-tax cash profit.

The original investment in player contracts is not really an investment in particular players; it is the purchase from the other teams of the right to have exclusive bargaining rights, through the player reservation system, with a proportionate share of the athletes in the sport. The particular athletes drafted by the team from other rosters as part of the league expansion are simply the first group whose athletic career is the exclusive property of the expansion team.

TABLE 3

SAN DIEGO PADRES INCOME STATEMENT FOR 1979

Revenues

Gate Receipts	\$5,560,000
Local Broadcasting	824,000
Concessions	842,000
National Broadcasting Share	653,000
Other Misc.	<u>232,000</u>
Total	\$8,111,000

Expenses

Team Salaries	\$2,798,000
Other Team Expenses	1,290,000
Stadium Rent and Maintenance	827,000
Scouting	411,000
Minor League Subsidy	914,000
Promotion	360,000
General and Administrative	837,000
Other Misc.	<u>1,144,000</u>
Total	\$8,581,000
Total	

Source: Los Angeles Times, March 1, 1980, p. III-7.

In time, they are replaced by other players through trades and acquisitions from the rookie free agent drafts. The asset that creates value in these contracts is not the contract itself, but the rules limiting competition among teams. These assets guarantee that competition for players, for broadcasting revenues, for home gate receipts, and for a place in which to play will not erode the profit earned from the player. And the assets that generate this profit--the restrictive rules in the league--have essentially a zero "cost of production." These anticompetitive agreements among teams constitute essentially all of the assets of every team in professional sports except the few that own their own playing facilities.

The question thus arises, what, if anything, is the true investment of society's scarce resources in a sports franchise? For one thing, an owner agrees to operate a team for a year, which means that some expenditures are made before any revenues accrue. The owner assumes the risk that revenues will be insufficient to cover these commitments; therefore some profit must be expected by the owner to induce him to take this risk. In addition, a new team must undertake certain promotional expenditures to generate fan interest. These costs, plus minimal investments in playing equipment, represent the team's only true investments in the sense of commitments of society's scarce resources. For most teams these costs will sum to no more than a few hundred thousand dollars, which implies that "normal" profits--those necessary to induce teams into the industry if cartel rights did not have to be purchased--are probably substantially less than \$100,000 annually. All of the profits in excess of a few tens of

thousands of dollars represent earnings created by monopoly rights. Judging from the bottom line of Table 1 and by the analysis of the Padres, most teams exceed "normal" profits, and in some cases by a very large amount.

One task remains in determining whether these monopoly profits signal excess demand for sports. That is to examine the demand for sports to see whether entry would leave teams with sufficient revenues to cover costs.

The demand for sports in a particular city depends upon normal economic factors--price and income--plus the quality of the team, the quality and ease of access of the facility in which it plays, and the alternatives available in the city for entertainment and recreation. Large cities have more people from which a team can generate an audience, but they are also more congested and have more entertainment alternatives. On balance, these effects produce a positive effect of population on attendance, holding other things constant, although a doubling of population will lead to less than a doubling of attendance.

Similarly, because of differences in teams and their playing schedules, the attendance generated by two teams will exceed the attendance either one would capture, holding ticket prices fixed, if it had no competitor. Multiple teams increase the number of days on which a game is available and reduce the congestion at a given game by lowering average attendance. In addition, if teams play in different locations, they reduce the average distance of area residents to the nearest source of games. For these reasons a second team will cause

some net addition to total attendance in its sport.

Statistical analysis of attendance at sports contests provides a rough estimate of the minimum population in a metropolitan area that can sustain a major league team in each professional sport, assuming that a team is viable as long as it makes positive profits. These minimum populations are shown in Table 4. They represent the size of city required for break-even operation of a team, neglecting any tax benefits that might be captured from the depreciation of player contracts. These figures are somewhat conservative, for they are based on data from the early 1970s. Because of growth in income, broadcasting revenues, and other things, the demand for sports is greater in the 1980s than it was a decade earlier.

Since few teams compete against other teams in the same sport in the same city, direct statistical analysis of the effects of such competition on the minimum population required for multiple teams is not feasible. The table contains one rough approximation that is consistent with what is known about existing teams. For example, two financially successful professional football teams have operated in the San Francisco-Oakland metropolitan area, which had a population of approximately 3.1 million in 1970. Two successful hockey franchises were located in the Boston metropolitan area in 1972-73, although one had great difficulty scheduling games in the arenas owned by the other. The Boston metropolitan area had a population of 2.8 million in 1970. In New York, with a population of nearly twelve million, two extremely successful franchises operate in all sports except soccer, with at least one in each sport earning profits as great as any team

TABLE 4
MINIMUM SIZE METROPOLITAN AREA FOR SUCCESSFUL TEAM
(population in millions)

<u>Sport</u>	<u>Years</u>	<u>1 Team</u>	<u>2 Teams*</u>	<u>3 Teams*</u>
Baseball	1970-71	1.9	3.4	4.9
Basketball	1969-71	4.0	7.6	10.7
Football	1968	1.0	3.1	5.4
Hockey	1972-73	.9	2.6	5.6

* Assumes that half of attendance of second team and two-thirds of attendance of third team are captured from competitors in the same sport, and that teams are of average quality, making playoffs in basketball and hockey about half the time. Based on early 1970s data.

Source: Calculated from statistical analysis of the demand for attendance at sports contests in Roger G. Noll, "Attendance and Price Setting," in Noll, Government and the Sports Business, Ch. 4.

in its sport. In baseball, two teams operate in Chicago, one of which is very successful while the other is marginal. Two teams that apparently suffer losses operate in the San Francisco-Oakland area. According to the table, the Bay area is about 10 percent too small to be able to support its baseball teams. This, coupled with its cold summer weather, probably makes it economically unviable as a location for two baseball teams, which seems to be borne out by the performance of the Athletics and the Giants in the 1970s.

The preceding leads to the conclusion that the territorial rights of teams do foreclose warranted entry in the largest cities, but that in the smallest cities in each league a team is a natural monopoly in that only one is viable. In baseball, for example, cities such as Atlanta, Kansas City, Milwaukee, and San Diego may not be viable locations for one baseball team, let alone two, while cities such as Cincinnati, Houston and Minneapolis probably can support one, but not two, teams. Nevertheless, the largest cities have too few teams. Chicago, Los Angeles and New York appear to be large enough for a third baseball team, and Philadelphia and Detroit for a second. Similar findings apply to other sports: most current franchise cities are natural monopolies, but the largest could support more teams. And, in football and hockey, a few cities now lacking teams are apparently large enough to support one.

These findings are, of course, crucially dependent upon the existence of the monopolistic market positions enjoyed by league members. Of the calculations shown in Table 4, only those for basketball were based upon a situation in which two established

leagues competed for players, and the minimum city sizes for viable operations are much larger for basketball than for the others. Had basketball salaries not accelerated due to competition between the ABA and NBA, each team would have paid, on average, about \$400,000 less per year in salaries during the 1970s. This would reduce the minimum metropolitan area population for one viable team to under two million. On the other hand, player salaries also reflect monopolistic territorial franchises. If New York, for example, has only two football teams, the value of a star player will be greater than if it has more teams, for more teams, in spreading attendance among more competitors, will reduce the number of fans--and hence the gate receipts--generated by a single star. Thus if players are paid their marginal revenue product, more competition in large cities could reduce player salaries in the same way that it reduces monopoly rents. This reduction in costs reduces the revenue necessary to make a team financially viable, so that the prospects for multiple teams in a city are somewhat better than indicated in Table 4.

The results in Table 4 also depend upon the gate sharing arrangement of the league. In baseball and football the visiting team receives part of the gate. As a result, teams in smaller markets are more likely to be economically viable. Teams from small markets receive more from the games they play in the best markets than they pay from home game receipts to teams from those markets. Were baseball to raise the visiting team share from the current 10 percent (National League) or 20 percent (American League) to the 40 percent paid in football, the minimum population for a financially successful

first team would fall to about 1.3 million, assuring that all cities that now have teams would be viable.

The main conclusion to be drawn from the financial analysis of major league sports is that the market structure of the industry is highly dependent upon the league rules regulating the sharing of revenue, the business competition among members and the expansion of the league. While some teams are natural monopolies, others are not. While all teams benefit from anticompetitive league rules, the biggest beneficiaries are the teams in the largest cities which earn monopoly profits, because of the entry barriers created by league rules.

CONDUCT AND PERFORMANCE

Economists have long debated the appropriateness of the conventional assumption that businessmen seek to maximize profits. In sports, the issue is of central importance, since the effect and desirability of prohibitions against competition depend critically on the motivation of team owners. The major justification offered by sports entrepreneurs for the player reservation system is that it prevents a single team from so monopolizing playing talent that it destroys fan interest in the game and, thereby, causes massive financial failure in the league.

This argument is valid only if the primary motivation of team owners is the unconstrained maximization of games won. If so, the owner with the greatest financial strength--probably the owner in the best market--will continue to acquire players until his team is sure to win all of its games. The resulting lopsided contests will prove

uninteresting to fans, especially in other cities, and every team--including the certain victor--will fail financially.

If owners seek only victory, the player reservation system does prevent the result described above, for it prevents the best-financed team from acquiring the players whose contracts are the exclusive property of other teams unless the other owners acquiesce.

If owners seek profits, the player reservation system has no effect on the distribution of playing strengths among teams. Without a player reservation system, the team for whom a player can generate the most revenues will offer him the highest salary, and in equilibrium all players will play for the team for which they have the greatest value. If any player is earning a wage from one team that falls short of his value to another, profit-maximization by the latter will prompt it to offer him a higher salary if he will switch teams.

With a player reservation system, the player cannot accept the higher wage and move to the team that values him most highly. But the teams can engage in the sale and trade of player contracts. If a team is paying a player exactly what he is worth to that team, but his value to another team is greater, both teams can benefit from a sale of the player's contract. Through sale the player's current team shares with the player's new team his greater value in another city. Thus, under both regimes the player ends up with the team for which he generates the greatest revenue. The only difference is that without a player reservation system, the player receives that greater value through a competitive labor market, while with a player reservation system the player's original team receives it from the sale of his

contract.

A third possible motivation of sports owners is that they maximize victories subject to a requirement that the team earn some minimum amount of profit (perhaps zero, or perhaps even negative). The predicted result of this motivational assumption is intermediate between those of the two other hypotheses. Each team would attempt to acquire a stronger team than would a profit-maximizer, assuming that the most profitable strength earns profits in excess of the minimum satisfactory amount. Among the predictions of this hypothesis are that no highly profitable team would ever sell a player unless it was for the purpose of hiring a better one. Another prediction is that no team would earn more than minimum profits as long as any opportunity existed for making an expenditure to improve the team.

Ticket prices, too, should be affected by the motivation of the owner. Sports entrepreneurs who regard profits as less important will be more likely to set prices on a cost-plus basis—that is, without profit motivation, a team that is highly successful on the field and also earns a large profit would be expected to cut prices.

Evidence on Motivation

From the preceding, data on player sales, profits and ticket prices should provide some clue as to the motivation of sports owners. In fact, these data all support the profit-maximization hypothesis.

The only definitive data on player transactions were collected by the Congress for selected years between 1929 and 1950 in connection with an investigation of professional baseball. During this period

the worst team in the American League in terms of won-lost percentage was the St. Louis Browns. The Browns showed cumulative profits over this thirty-year period of about \$1.1 million and net sales of player contracts of approximately \$2.3 million. From this one can conclude that, while the Browns' entire profit was accounted for by the sale of players, nevertheless the team could not have been an unabashed maximizer of victories. It sold more than \$1 million more in players than were necessary for break-even operations, some of whom presumably could have added a few victories to the Browns' miserable record.

During the same period, the Brooklyn Dodgers were a better-than-average team, tying for the fourth-best won-lost percentage among the sixteen teams then in major league baseball. They also had the fourth highest profits in baseball—and a net income from sales of player contracts of over \$800,000. In fact, they were the second-leading team in the National League in terms of net player sales. Had they sought primarily victory on the field, they would not have sold so many players while earning profits and failing to win the most games.

Recent history in professional basketball also illustrates the tendency for players to move towards the cities valuing them most highly. The Los Angeles Lakers have continually maintained their playing strength—and their status as one of the most profitable basketball franchises—by acquiring talent from other teams. Among the players of star or superstar status acquired by the Lakers from other teams through either cash purchases or, when economic aspects of the transaction are not considered, unequal trades are: Wilt

Chamberlin, Bill Bridges, Happy Hairston, Gail Goodrich, Connie Hawkins, Kareem Abdul-Jabbar, Jamaal Wilkes, and Jim Chones.

Another prime basketball market is New York City, and the Knickerbockers and Nets have also been active in the acquisition of players from other teams through transactions with strong economic overtones. Among the stars that the New York teams acquired from franchises in smaller markets are Jerry Lucas, Dave DeBuscherre, Earl Monroe, Julius Erving, and Rick Barry.

There is also no evidence that teams become so good that they actually begin to lose money. Table 5 shows the ranking of baseball teams by cumulative won-lost record and estimated cumulative profits during the 1929-50 period. In both leagues artistic and financial success went hand-in-hand, with the best teams also being the most profitable. There is no evidence that any team—even the dynastic Yankees—surpassed the profit-maximizing team strength.

The ticket prices charged by the most profitable teams show no evidence of the kind of cost-plus pricing that would be predicted by the models that assume the maximization of games won. In baseball, the eight teams that were most profitable during 1970 and 1971 earned about \$1.8 million per team more in net revenue than the baseball-wide average.[/] Their ticket prices were not statistically significantly

[/] Noll, "Attendance and Price Setting," in Noll, Government and the Sports Business, pp. 125-126.

TABLE 5
RANKING OF BASEBALL TEAMS BY LEAGUE IN CUMULATIVE
PROFITS AND CUMULATIVE WINS, 1929-1950

Team	Won-Lost Record		Estimated Profits	
	Fraction Won	Rank	Amount (Millions)	Rank
American League:				
New York	.617	1	\$8.5	1
Detroit	.537	2	4.7	2
Cleveland	.534	3	3.7	3
Boston	.508	4	-2.1	8
Washington	.481	5	2.7	4
Philadelphia	.451	6	1.091	6
Chicago	.449	7	1.3	5
St. Louis	.420	8	1.088	7
National League:				
St. Louis	.587	1	6.0	1
Brooklyn	.529	2	3.9	2
Chicago	.529	3	2.92	4
New York	.524	4	2.89	5
Pittsburgh	.508	5	3.2	3
Boston	.463	6	-.3	8
Cincinnati	.463	7	1.6	6
Philadelphia	.394	8	0	7

Source: James P. Quirk and Mohamed El Hodiri, "The Economic Theory of a Sports League," in Noll, Government and the Sports Business, Ch. 2.

different from other teams. Obviously they did not cut ticket prices or purchase more player contracts to improve performance in response to greater profits. In basketball, the New York Knickerbockers are, by far, the most profitable franchise. They also charge, by over \$2.00 per ticket, the highest prices in basketball. Clearly, they are quite profit oriented, but this is to be expected since they are a subsidiary of a publicly-held corporation. The Lakers are more typical of sports in their ownership, being a privately-held corporation that is controlled by a wealthy individual. They are the second most profitable basketball team and charge the second-highest prices.

The final evidence that sports enterprises are generally profit oriented is the contrast between average behavior in sports and the behavior of the very few teams in history that were not totally profit oriented. In baseball, the late Tom Yawkey of the Boston Red Sox and Phil Wrigley of the Chicago Cubs were regarded as "sportsmen" owners. These teams charged, by far, the lowest prices in baseball. They also had atypically low local broadcasting revenues. The Cubs still refuse to schedule night games at home, even though all other teams have found that night games are more profitable. The Red Sox were the only team to lose a significant amount of money during the 1929-50 period. During this same period, the Red Sox and Cubs ranked second and third in purchases of player contracts. Still, they were unable to achieve dominance in their leagues, finishing fourth and tied for second, respectively, in cumulative won-lost percentage.

The histories of the Cubs and Red Sox illustrate two important phenomena. First, these teams behaved so differently from others that it is reasonable to conclude that the others are motivated mainly by profit. Second, their inability to dominate play--or even to win their share of pennants (between 1945 and 1980 the Cubs captured one pennant, the Red Sox two)--indicates that a few sportsmen owners do not succeed in unbalancing competition on the field by acquiring most of the good players.

The performance of sports enterprises supports the conclusion that neither the purpose nor the effect of the player reservation system is to prevent economically irrational owners from destroying the balance of strength among teams in a sport. Instead, as economics predicts, its effects are to lower player salaries to the benefit of owners and, through sales from weak to strong teams, to increase the revenues of the former. While this can make more teams in a league viable--for example, by converting the disastrous Browns to a profitable venture in the 1929-50 period--it is not any more effective than more direct revenue-sharing arrangements, such as splitting gate receipts and broadcasting revenues among participating teams.

Cartel Cheating

A sports league is, in economic terms, an organization of competing firms for the purpose of designing and enforcing rules that limit competition. The monopoly rights enjoyed by teams are created by the league cartel, for in the absence of league rules teams could be expected to compete in the broadcasting and player markets, and in

the larger cities competition in the admissions and stadium markets would also ensue.

In a competitive market, equilibrium price and output is economically efficient in that price is equated to marginal cost. Should a situation arise in which firms earn profits in excess of the amount necessary to keep them economically viable, expansion of existing firms and entry of new firms will increase output, force down prices and return profits to the competitive equilibrium. The process by which competition lowers prices and profits operates because each firm perceives an incentive either to expand output or to enter the market in response to excess demand, even though its behavior, and that of its competitors, eventually leads to lower profits for all.

In a cartel, firms perceive the same incentive to engage in behavior that, were it followed by all, would destroy the monopoly profits generated by the cartel's anticompetitive arrangements. Consequently, the cartel is inherently unstable. Its members will perceive an incentive to respond to new opportunities to gain a competitive advantage, either by violating the rules (especially if the violation is likely to go undetected) or by behaving competitively should a situation arise that is not covered by league rules.

To combat this behavior all cartels—including those in sports—must devise penalties for violating the rules, information systems for detecting violations and procedures for revising rules in response to new economic conditions. Each league in professional sports has a published, continuously updated list of operating rules (in addition to playing rules) which serve these functions. And,

judging from the frequency with which rules are changed and penalties invoked, sports leagues are continually beset by the problem of cheating—that is, behavior by one or more members that erodes the monopoly profits of all. Of course, in the sense used here, cheating is not a pejorative term. Behavior that is cheating in a cartel is called innovative in an industry that is competitive.

Cheating by violation of league rules is not common in professional sports, but it is by no means unknown. Violation of most of the monopolistic rules practiced by a league is extremely obvious when it takes place. A team cannot play or broadcast a game in another team's home territory without easily being detected, nor will it be able to sign a player from another team's roster without instant recognition. Enforcement of these rules involves granting the Commissioner of a sport the power to impose stiff penalties on violators. Commissioners have the power to impose heavy fines—in the form of money, players or even expulsion from the league. Since detection is virtually certain, a gain virtually impossible, and significant loss almost inevitable, the most obvious forms of cheating almost never occur.

Two recent cases illustrate the mechanics by which leagues enforce these rules in the rare instances in which they are broken. George McGinnis and Julius Erving, two exceptionally talented basketball forwards, played the first few years of their careers for teams in the American Basketball Association. Nevertheless, the NBA draft rights to each were still valid, the Philadelphia 76ers having rights to McGinnis and the Milwaukee Bucks to Erving. Both players

were signed by another NBA team, with the New York Knickerbockers signing McGinnis and the Atlanta Hawks coming to terms with Erving. The league then severely fined both teams and declared each contract invalid. The amount of the fines is not precisely known, but they involved both cash and the loss of negotiating rights with other players.

Violations of a few of the rules are extremely difficult to detect. One is the roster limit. Every sport sets a limit on the number of players that can be under contract to any one team. While teams cannot easily field more than the legal number of players without detection, they can rather easily sign contracts with a number that exceeds the roster limit. In case of an injury or an unexpectedly bad performance, a legal roster player can then be replaced by an alleged "free agent" who "just happened" to be ready to play. While they are not being used, the illegally signed players can be playing minor league ball, sometimes under an assumed name, or simply attending secret, separate practice sessions held by the team somewhere other than the team's normal practice area.

In 1974 the Houston Oilers were accused of "stashing" players--of having 58 players under contract despite the 47-man roster limit of the NFL. An official of the team was reportedly fined \$5000 by the league office for this practice, a trivial sum in comparison with the salaries these eleven players were likely to have been paid. Similar stashing episodes have taken place in baseball, but they have become rarer with the demise of the minor league system. In the days when scores of independent minor leagues were operating, a team had a

good chance of keeping the talents of an illegally signed, talented young prospect unnoticed on some obscure minor league team. (If the player were noticed, another team might try to buy his contract from the minor league club and discover that he was already under contract to a major league team.)

To keep the player from being noticed while developing his skill, the team would impose strange requirements on the minor league team to keep his record from appearing too good, such as playing him part of the time in the wrong position so that he would have a poor fielding record, or leaving him out of the lineup against weak pitchers to depress his batting average. These tactics, of course, could not work for long, but they gave the team a little extra time to decide whether to place a player on the roster and thereby to protect him from acquisition by a competitor.

Interfering with the mechanism by which free agents are drafted is also a relatively easy way to cheat. For example, a few years ago several football teams received a letter from a top college prospect warning them against "wasting a draft choice" on the player since he had decided to play baseball instead of football. One owner contacted the player and discovered that he was unaware of the letters and, in fact, was leaning towards football. Apparently another team in the league, desirous of his services, had tried to dissuade others from drafting the player so that he would still be available by the time the draft had proceeded to the team's turn. (The identity of the culprit was never publicly disclosed.)

The most common form of cheating is violation of the spirit, but not the letter, of league rules, in response to a new competitive opportunity. In so doing a team usually can expect to gain only a temporary advantage. Either league rules will be changed to make the team's action illegal, or other teams will all adopt the same practice, often to the detriment of all.

Currently the opportunity for subscription television (pay TV) on cable television systems has led to this kind of cheating. League rules prohibit broadcasting into another team's territory; however, cable pay-TV is not, technically, broadcasting. In 1973 the New York Knickerbockers sold rights to their home games to a pay-TV firm, who then proceeded to offer them on a cable system in the home territory of the Philadelphia 76ers. This prompted the league to employ economists at the Rand Corporation to help it devise rules for dealing with cable television; meanwhile the Knicks and their licensee derived some temporary advantage.

Perhaps the most important example of innovative behavior that evaded league rules was the development of baseball's minor league farm system by Branch Rickey. During the 1920s several minor leagues refused to allow their players to be drafted by major league teams. Instead, they sold player contracts to the highest bidder, thereby extracting some of the gains of the majors' reserve system. Rickey's innovation was simple but devastating: his team, the St. Louis Cardinals, acquired or established exclusive agreements with several minor league teams. These minor league clubs could sign players to minor league contracts without exceeding the Cardinals' roster limit,

and then refuse to sell the contracts to any team except the Cardinals.

Rickey soon realized that his innovation had even better possibilities. He rapidly developed a larger minor league farm system than was required to develop players only for the Cardinals, and the Cardinals became baseball's biggest net seller of player contracts to other teams. Rickey had discovered an intricate mechanism to monopolize playing talent without paying for it (players were signed as youngsters to become minor league players) and without violating the roster limit. As a result, the Cardinals became the best team in the National League, despite being located in a relatively small market that was nonetheless shared with another major league team. They also became the league's most profitable team, earning well over half of their profits from the sale of player contracts.

By the time the other teams realized what had taken place, the Cardinals were entrenched in the minor leagues. Formation of an equal number of minor league teams by other major league franchises was impossible unless economically unviable teams were created. And prohibition of the farm system would have meant returning to a situation in which independent minor league teams sold players competitively to the majors. The only remaining step—a limitation on the number of teams that a major league franchise could own—was of dubious legality should Rickey challenge it and, in any event, a confiscation of property that the owners were unlikely to find agreeable. Judge Landis, who opposed the farm system on the grounds that it would prove to be too expensive and to destabilize competitive

balance, brought the issue to a head by declaring several farm system players available to other teams because their major league teams were violating the roster limit. The owners overrode him, and he did not choose to invoke his ultimate power--to declare the practice illegal because it threatened the "integrity of the game." Not until the economic collapse of the minor leagues in the 1950s did the leagues achieve a relatively even distribution of minor league farm teams.

The demise of the minors provides another example of innovative competition in baseball. The minors were killed by television. National and regional telecasts destroyed attendance at minor league games on Saturdays and Sundays, and as a result teams began to lose money. Major league teams responded by subsidizing the farm system. By 1970, major league teams were receiving about \$1.4 million each in broadcasting revenue, but they were subsidizing minor leagues to the tune of \$1.3 million each.

The rules of baseball governing territorial rights were written when radio, not television, was the broadcasting vehicle of principal interest to the owners. These rules permitted broadcasts of major league teams into the home territories of lower status leagues, even when the minor league team was playing at home. This was, of course, a benign provision; radio was hardly a threat to minor league attendance.

With the advent of television, opportunities for lucrative broadcasting contracts increased, and teams began televising games regionally and nationally. Television eroded minor league attendance by direct competition and by the invidious comparisons of the skill

with which the game was played. The latter point was emphasized by a Los Angeles sports writer who reported the following conversation after the first televised World Series. "I'll wager that the Series telecast killed baseball on the Coast. By your standards Bobby Brown is just an average third baseman. By our standards he pulled fielding plays such as we on the Pacific Coast had never seen before." The response: "Wait until you see a miracle worker like Billy Cox. He'll finish off the Pacific Coast League all by himself."✓

✓ New York Times, December 9, 1952, p. 46.

In the late 1940s, baseball could have devised a policy toward broadcasting that took account of the effect of broadcasts on the minor leagues. But once extensive telecasting had begun, politically and legally there was no return--and the minor leagues were essentially dead. As the figures on revenues, costs and minor league survival rates attest, it is by no means obvious that baseball has benefitted from television, despite its ability to establish monopoly prices in both the local and national broadcasting markets. The natural tendency of businessmen is to respond competitively, rather than collusively, to the opportunity for short-run gain outside the reach of cartel rules. The rise of television and fall of the minor leagues--to little net effect--is an excellent illustration of the point.

Cartel Innovation

In some instances innovations that benefit all teams, or at least that hurt no one, require league approval if they are to be tried. Examples include changes in playing rules (the American League's designated hitter, the old AFL's two-point conversion), increases in league membership through expansion or merger, and relocation of franchises.

These changes normally require consent by a large majority of league members--usually three-quarters. Two features of cartels make this a difficult obstacle to surmount. First, the entrepreneurial skills and foresight of cartel members are certain to differ. In a competitive environment, only one skilled entrepreneur need perceive an opportunity for innovation. He will pursue it first, and his competitors will be forced to follow or face permanent competitive disadvantage, even demise. But to achieve a three-quarters majority, each innovative idea must appeal to some entrepreneurs of below-average vision and ability.

A second feature that retards innovation is the incentive facing each member to fake injury in the hopes of receiving compensation. For example, when the American League decided to become a truly American league by placing the California Angels in Los Angeles, the Angels had to pay damages to the Dodgers--in retrospect, a wholly unnecessary ransom to one of the nation's most successful franchises. More generally, an owner, if his vote is critical, may collect some bribe from the proponents of change by holding out at the beginning.

As a result of these features, cartels can be expected to be exceptionally conservative. While this retards the adoption of bad ideas, it also weeds out much that is worthwhile. If good business ideas outnumber the bad--and continued technical progress indicates that they do--the result is inefficiently slow progress.

In most instances the introduction of a competitive league is a response to a failure to change on the part of the established league. For a new league to survive, it must be able to acquire viable franchise sites and quality players. Its success depends, therefore, upon a failure by an established league to expand as fast as it should. Furthermore, new leagues or financially troubled older ones often adopt playing and institutional innovations that eventually are adopted by more successful--and more conservative--competitors. Thus, the ABA added the three-point long-shot basket, the World Football League used a limitation on total salary payments by a team rather than a player reservation system, and, in response to financial difficulties, the American League inserted the Designated Hitter into the lineup to add offense to a game many regarded as too dull for contemporary tastes. Meanwhile, innovative owners--from Bill Veeck (who invented "bat days" and exploding scoreboards, and who once pinch-hit a midget to draw a certain walk) to Charles Finley (who favored orange balls and two-platoon baseball)--are not only criticized by their peers, but pressured to leave the sport.

Conclusions on Conduct and Performance

The actions of sports entrepreneurs indicate that the appropriate model for analyzing the industry is the familiar theory of profit-maximizing, competitive firms that belong to a cartel. The cartel has stability problems, owing to the fact that owners take advantage of opportunities to violate rules when they think they can get away with it and to respond competitively, rather than collusively, to situations not fully covered by league rules--often in so doing preventing the adoption of new rules to restore the cartel's ability to create protected monopolies. The cartel also tends to be lethargic, finding difficult the adoption of mutually beneficial changes.

Because a few cartel rights are difficult to breach--territorial rights and league membership, for example--the cartel can generate monopoly rents despite its weaknesses. And because it can create barriers to entry, the introduction of competitive leagues is only a loose check on its operations. The result is economic inefficiencies of the following type:

Too few cities have teams, and too few teams are located in the largest markets.

Too few players are induced to play.

The operating and playing rules change too slowly.

Too few games are telecast, especially simultaneously.

Prices in the product market are too high--for both tickets and broadcasting rights, although broadcasting is itself a

source of inefficiency owing to its imperfectly competitive market structure.

PUBLIC POLICY: PAST AND FUTURE

Professional sports has been successful in the past in obtaining governmental sanction of its anticompetitive practices. The long-standing antitrust exemption of baseball's reserve clause, recently upheld in Flood vs. Kuhn, is only one example. Legislative action has explicitly exempted cartel relations for selling broadcasting rights and, in football, legislation passed in 1966 exempted from antitrust actions the merger of the NFL and AFL. Finally, local governments have raised barriers to entry of new leagues by giving teams exclusive leases to use publicly-owned facilities and, in many cases, by renting these facilities to established teams at rates below cost.

Until the 1970s, the only major setback suffered by professional sports was the decision in Radovich vs. NFL that declared illegal football's counterpart to the baseball reserve clause. While Congress did not override this decision with exempting legislation, as it later overrode judicial decisions that found league-wide broadcasting packages illegal, the effect of Radovich was too small to discern. By 1963, football had replaced the reserve system with the equally effective option-compensation system. The so-called Rozelle Rule went without legal challenge until a spate of antitrust cases was launched by players in the mid-1970s.✓

— Kapp vs. NFL and Mackey, et al. vs. NFL were discussed above; in addition, in Smith vs. Pro-Football, Inc., CA 1643-70, District of Columbia, former Washington Redskins defensive back Yazoo Smith sued to recover the amount by which his first year salary was depressed because of lack of competition for his services.

Since 1970, government has become less willing to sanction anticompetitive practices in sports. In 1971, the ABA and NBA requested Congressional approval of a merger of the leagues. After protracted hearings, the Senate Subcommittee on Antitrust and Monopoly drew up a bill granting permission to merge—but only on the conditions that (1) the option-compensation system be eliminated; (2) the leagues adopt a revenue-sharing system in which the ABA received a proportionate share of broadcasting rights and the visiting team received 30 percent of the gate; and (3) the free agent draft be changed so that a rookie would be bound to the team that drafted him for only two years. Because the NBA did not approve the terms of the bill, it died in committee and the leagues were not then merged. Eventually, four ABA teams applied for NBA membership, and the ABA folded, but the legal status of the single major professional basketball league that emerged is unclear until tested in court.

The record of pro sports has also not been good of late in winning court tests of its anticompetitive practices. In Philadelphia World Hockey Club, Judge Higgenbotham ruled hockey's player reservation system unenforceable because it violated antitrust laws. His ruling permitted the World Hockey Association to retain the

National Hockey League players it had signed, amounting to about 25 percent of the previous season's NHL rosters. In Kapp vs. NFL and Mackey vs. NFL, the Rozelle Rule has been held to be a per se antitrust violation. In Laird vs. U.S.— the proportion of the

— Civ. 17892, U.S.D.C. Northern Georgia.

original cost of a football team that can be allocated to player contracts and depreciated was reduced from 99 to 43 percent. This decision reduces the potential after-tax income to the owners of the Tampa Bay and Seattle NFL expansion franchises by over \$1 million per year for the first five years they own the teams. The franchises originally sold for \$16 million; depending upon the tax status of the owners and how long each owner expected to retain the team, the ruling diminishes the value of each team by four to seven million dollars.—

— If the team is sold each time the player depreciation is exhausted, the sales price will almost all be taxed as capital gains. For a wealthy individual, the capital gains tax rate is about half the rate on earned income. The ruling prevents the team from claiming about \$8 million in depreciation over five years, which would reduce taxes by about \$5.5 million could it be claimed. When the team is sold, capital gains taxes would claim \$2.8 million more than if

depreciation had not been taken. This cycle could be repeated every five years by different owners. The present value of an indefinite stream of revenues of plus \$1.1 million every year and minus \$2.8 million every five years is, at a 10 percent discount rate, about \$6.5 million. If the team is never sold, the five years of depreciation are worth, in present value terms, about \$4 million.

Despite the gains in the past few years in undoing some of the special privileges enjoyed by sports, the long-run significance of the favorable judicial attitude is open to serious question. Even if the player reservation is completely eliminated, product market competition will still come only from new leagues, and historically competitive leagues always have either failed or merged. Although only football currently enjoys legislative permission for mergers, the other sports may well succeed in convincing Congress that this legislative protection should be extended to them. Judging from the bill drawn up by the Senate Subcommittee on Antitrust and Monopoly on the proposed merger of the two professional basketball leagues,[/]

[/] S.2372, reported September 18, 1972. The bill eventually died in committee when the leagues could not agree to merge under the terms of the bill. For further discussion, see Roger G. Noll, "Alternatives in Sports Policy," in Noll, Government and the Sports Business, pp. 426-428.

Congress apparently was willing to permit merger if the leagues would guarantee that merger would not cause a reduction in the number of franchises and a restoration of the option-compensation system for controlling players. Congress has shown no evidence to date of undoing most of the anticompetitive practices pertaining to the product market for sports, such as league-wide bargaining in the sale of broadcast rights, exclusive territorial franchises, and the tight controls leagues place on expansion.

Even if the contractual relationships of players and teams are made fully competitive, the practices that most affect sports fans are unlikely to be affected. Only when an entire league can be formed does competition work in favor of the fan by increasing his access to sporting events. As argued above, this is a weak control on the anticompetitive practices of established leagues.

Prior to the surprising attempt of the Oakland Raiders to move to Los Angeles, the antitrust environment seemed unlikely to deal with the issues affecting fans. The major participants in the business of sports do not have an incentive to make the industry competitive. Clearly both existing and potential owners benefit from the various restrictions against competition because these rules are the source of the profitability of ownership. A team or league that achieved its objective only by destroying these product market protections would severely reduce its own future profits. Furthermore, players have no interest in increasing product market competition. The additional profitability of sports that results from these anticompetitive practices increases the market value of established players and

generates a source of additional revenues that can be shifted at least in part from owners to players through collective bargaining. Yet some people seem to be willing to flow against the incentives. Not only is Al Davis, the owner of the Raiders, willing to threaten territorial rights, but so, too, have the hundred-odd soccer players made exclusive territorial franchises a complaint in their suit against the NASL.

Nevertheless, in order to increase competition in sports, direct government intervention is probably necessary. The current cases are probably anomalous. Basically, government action could take one of three forms: legislation setting down the terms under which leagues can gain certain antitrust exemptions; creation of a government agency to deal with sports as a regulated industry, controlling some or all aspects of its behavior in both product and labor markets; or an attack by the Department of Justice on sports as anticompetitive on grounds other than those normally raised when players or competitive leagues seek antitrust relief.

Needless to say, the pros and cons of these alternative mechanisms are complicated, and a definitive review of them is not within the bounds of this chapter. / A summary judgment is that the

/ A more complete discussion can be found in Noll, Government and the Sports Business, especially Steven R. Rivkin, "Sports Leagues and the Federal Antitrust Laws," and Roger G. Noll, "Alternatives in Sports Policy."

performance of regulatory institutions in other industries is not particularly good, especially when the purchasers of the regulated industry's products are not particularly well-represented by armies of lawyers and experts in the proceedings of the agency, so that enactment of a law establishing a Federal Commission on Sports would probably be unwise, perhaps disastrous. Similarly, the demands upon the Antitrust Division of the Department of Justice are so great compared to its resources that litigating suits against professional sports probably should not have a high priority in that agency, especially since the actual outcome in terms of the institutional arrangements that the judicial system might favor is so much in doubt.

This leaves legislative remedy. The performance of the Senate Subcommittee on Antitrust and Monopoly in response to the requests for a basketball merger gives some hope for this alternative. While the Subcommittee did not directly attack many of the league practices that most affect fans, they did go a long way toward hammering out a workable set of rules for league operations. A significant achievement was their recognition of the importance of league rules regarding the sharing of revenues as a more important factor in determining the size and stability of leagues than the rules regarding competition for players. Since the issue at hand before Congress involved a sport for which consumer demand was relatively weak at that time, it is not particularly surprising that the proposed legislation did not deal with the rules governing expansion, territorial rights, and exclusive stadium leases. Judging from the relatively sophisticated approach of the Subcommittee to the problems of

professional basketball, it is at least conceivable that a more sweeping examination of all sports might produce sensible legislative decisions on these issues as well.

SUPPLEMENTARY READING

A. NONTECHNICAL

Andreano, Ralph. No Joy in Mudville: The Dilemma of Major League Baseball. Cambridge: Schenkman, 1965.

Durso, Joseph. The All-American Dollar: The Big Business of Sports. Boston: Houghton-Mufflin, 1971.

Koppett, Leonard. A Thinking Man's Guide to Baseball. New York: E. P. Dutton, 1967.

Peterson, Robert. Only the Ball was White. Englewood Cliffs: Prentice-Hall, 1970.

Seymour, Harold. Baseball: The Early Years. New York: Oxford, 1960.

_____. Baseball: The Golden Age. New York: Oxford, 1970.

Veeck, Bill, with Ed Linn. Veeck--as in Wreck. New York: Putnam, 1962.

B. TECHNICAL

El Hodiri, Mohamed and James Quirk. "An Economic Model of a Professional Sports League." Journal of Political Economy 70 (November-December 1971).

Jones, J. C. H. "The Economics of the National Hockey League."

Canadian Journal of Economics 2(February 1969).

Neale, Walter C. "The Peculiar Economics of Professional Sports."

Quarterly Journal of Economics 78(February 1964).

Noll, Roger G., ed., Government and the Sports Business.

Washington, D.C.: Brookings, 1974.

Quirk, James P. "An Economic Analysis of Team Movements in

Professional Sports." Journal of Law and Contemporary Problems

38 (Winter-Spring 1973).

Rottenberg, Simon. "The Baseball Players Labor Markets." Journal

of Political Economy 38(Winter-Spring 1973).

Scully, Gerald W. "Economic Discrimination in Professional

Sports." Journal of Law and Contemporary Problems 38 (Winter-

Spring 1973).

_____. "Pay and Performance in Major League Baseball."

American Economic Review 64 (December 1974).

Sloane, Peter J. "The Economics of Professional Football: The

Football Club as a Utility Maximizer." Scottish Journal of

Political Economy 18 (June 1971). Note: football here means

soccer.

Topkis, Jay H. "Monopoly in Professional Sports." Yale Law

Journal 58 (April 1949).